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| 10/679,323 | 10/07/2003 | Masahiro Inoue | Q77822 | 2674 |

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EXAMINER

WEST, LEWIS G

ART UNIT PAPER NUMBER

2618

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/679,323

Applicant(s)

INOUE, MASAHIRO

Examiner

Lewis G. West

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1 page</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Fisher (US 4,931,805).

Regarding claim 2, Fisher discloses a Dedicated Short-Range Communications (DSRC) on-board unit with an adhesive material comprising: an antenna (15) for communicating with roadside radio equipment (see col. 2 lines 10-13, cellular communications would involve communicating with a base station radio equipment, which could be roadside, and as the location of the equipment is merely an intended use and as no roadside equipment is positively claimed, the limitation is met by the art); a housing (outside engaging portion 13) in which only said antenna is housed (Col. 2 lines 35-47); and an adhesive material (in the context of this claim, both the silicon gel adhesive 34 and the double sided tape adhesive 32, or the combination of the two, read on this limitation) having a first surface affixed to said housing and a second surface for affixing to a vehicle window (Col. 2 lines 48-67), wherein: a protruding portion engaged with said adhesive material is disposed on said housing. (see Figure 4, wherein the silicon adhesive is engaged with a protruding portion of the device to be mounted by being applied to channel 30)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher (US 4,931,805) in view of Baratono (US 6,549,793).

Regarding claim 1, Fisher discloses a Dedicated Short-Range Communications (DSRC) on-board unit with an adhesive material comprising: an antenna (15) and a radio portion a data processing portion (cellular phone) for communicating with roadside radio equipment (see col. 2 lines 10-13, cellular communications would involve communicating with a base station radio equipment, which could be roadside, and as the location of the equipment is merely an intended use and as no roadside equipment is positively claimed, the limitation is met by the art) a housing (outside engaging portion 13) in which at least antenna is housed (Col. 2 lines 35-47); and an adhesive material (in the context of this claim, both the silicon gel adhesive 34 and the double sided tape adhesive 32, or the combination of the two, read on this limitation) having a first surface affixed to said housing and a second surface for affixing to a vehicle window (Col. 2 lines 48-67), wherein: a protruding portion engaged with said adhesive material is disposed on said housing. (see Figure 4, wherein the silicon adhesive and tape are engaged with a protruding portion of the device to be mounted by being applied to channel 30) but does not expressly disclose that the said radio portion, and said data processing portion may be mounted in the attached housing with the antenna.

Baratono discloses an adhesive mounted on-board communication device including an antenna, a radio portion and a data processing portion for processing received data from the radio portion wherein the radio portion is mounted in the same housing with the antenna. (Col. 2 lines 50-55). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include the radio and processing portions in the mounted device, as is suggested in Baratono (Col. 4 lines 24-32) that all communications circuitry, may be included in the same housing or certain portions may be placed elsewhere in the vehicle. Therefore it would have been reasonable to use the advantages of either situation, while the structure in Fisher would provide for more possibilities in antenna placement, it would also have been apparent to one of ordinary skill in the art that combining all circuitry in one device would provide for easier manufacturing.

Regarding claim 3, the combination of Fisher and Baratono discloses the Dedicated Short-Range Communications (DSRC) on-board unit with an adhesive material according to claim 1, wherein: said protruding portion is fitted into an aperture formed on said adhesive material. (See Fisher, Figure 4, wherein the adhesive layer, which includes the silicon and tape, form an aperture within which a protruding portion of the housing resides)

Regarding claim 4, the combination of Fisher and Baratono discloses the Dedicated Short-Range Communications (DSRC) on-board unit with an adhesive material according to claim 1, wherein: a height of said protruding portion is less than a thickness of said adhesive material. (See Fisher, Figure 4, wherein the adhesive layer, which includes the silicon and tape, form an aperture within which a protruding portion of the housing resides, and this protruding portion is narrower in thickness than the height of the silicon gel adhesive)

Art Unit: 2682

Regarding claim 5, the combination of Fisher and Baratono discloses the Dedicated Short-Range Communications (DSRC) on-board unit with an adhesive material according to claim 1, wherein: a leading end surface of said protruding portion is a flat surface. (See Figure 4 of Fisher, the portion of the protrusion adhered to the double sided tape is flat.)

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fisher (US 4,931,805) in view of Baratono (US 6,549,793) and further in view of Wunderling (US 4,931,806).

Regarding claim 6, the combination of Fisher and Baratono discloses the Dedicated Short-Range Communications (DSRC) on-board unit with an adhesive material according to claim 1, but does not address how antenna adjustments are made. Wunderling discloses a communication with an antenna in the adhesively mountable section wherein the antenna characteristics are matched by adjusting a shape of said antenna. (Col. 6 lines 5-17) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to adjust the antenna characteristics by changing the shape, as the nature of antennas dictates that size and shape determine their characteristics, and by changing the shape to improve these characteristics may reduce loss and unwanted radiation at the device as well as improving the received signal. (See Wunderling col. 5 lines 12-17) and Wunderling further expresses that it incorporates the structure of the Fisher reference (see col. 3 lines 26-41)

Art Unit: 2682

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis G. West whose telephone number is 571-272-7859. The examiner can normally be reached on Monday-Friday 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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